

REMARKS

The Office Action dated January 10, 2006 in the above-identified patent application has been carefully considered. In the Office Action, claims 1-24 were rejected on prior art grounds. By way of this amendment, claims 1, 9, 13, 18 and 22 have been amended. Claims 25-27 have been added. Applicant respectfully requests reexamination and reconsideration in view of the foregoing amendments and the following remarks.

As a preliminary matter, Applicant notes that the previous rejections have been overcome. However, the Examiner has now advanced novelty rejections against claims 1-5, 9, 11-13, 15 and 17 over Rabe et al., U.S. Patent No. 6,531,142. As to the composition claims, the Examiner has basically asserted that Rabe et al. contemplates a combination of the claimed composition components and that various properties recited in the claims would be inherent. While Applicant disagrees, particularly with some of the inherency arguments and the asserted teachings of Rabe et al., Applicant, for purposes of prosecution efficiency, has amended independent claims 1, 9, 13 and 22 to more clearly distinguish Rabe et al.

Importantly, it is noted that Rabe et al. pertains to a topical composition which is applied to the skin and more specifically to "color cosmetics and skincare compositions." (See Rabe et al., col. 1, lns. 14-18). The entire essence of Rabe et al. is that such topical compositions include immiscible and insoluble particulates which need to be electrostatically discharged topically onto a skin surface, such as cosmetic pigments.¹ Indeed, Rabe et al. teaches use of substantial immiscible and insoluble particulates for electrostatic dispensing in the amounts of 2% to 20% pigment for coloration and about 2% to about 15% of non-pigmented particulates, in the disclosed preferred embodiment (see col. 11, ln. 51 – col. 12, ln. 4).

An additional substantial distinction is that Rabe et al. teaches compositions that are directly applied to the skin by electrostatic spray techniques. Col. 12, lns. 8-9. This requires use of a spray nozzle to cause the composition to spray "electrically-charged droplets" which seek the closest earthed object to discharge their electric charge." Col. 12, lns. 13-15. This is substantially different than a vapor and aerosol

¹ See col. 6, lns. 21-67; and particularly col. 3, lns. 23-34 indicating that all of the topical compositions described in the reference include between .1% and 35% particulate matter which is insoluble and immiscible in the composition; and that thickening agents are provided to stabilize the composition and to increase viscosity to reduce wicking of the composition droplets (see col. 7, lns. 21-30 and col. 3, ln. 61 – col. 4, ln. 11).

suspension as per Applicant's disclosure. Indeed, the Rabe et al. reference is very clear about its application to skin, and that the electrostatic discharge apparatus is an electrostatic sprayer which discharges electrically-charged droplets through a nozzle for topical skin treatment. (See col. 12, generally).

Considering these significant distinctions, Applicant has amended the independent composition claims of claims 1, 9 and 22. Claims 1 and 22 have been amended to recite that all composition components of the disinfectant composition for electrostatic dispensing are at least one of soluble and miscible. This is directly contrary and not disclosed in the Rabe et al. reference which requires particulate powder material which is "insoluble and immiscible in the composition," which is in fact electrostatically sprayed and therefore dispensed on the skin. Support for the amendment is found generally in Applicant's disclosure and particularly, for example, in each of the examples provided which are disclosed that inherently include only soluble or miscible components for electrostatic discharge. The amendment makes clear that the compositions of the subject claimed invention are not skincare or cosmetic compositions which would form droplets containing substantial immiscible and insoluble particulates with topical attributes, but aerosol disinfectants which are used for vapor aerosol suspension for the purpose of disinfecting air. Thus, the novelty rejections can no longer stand. A novelty rejection can only stand if each and every claim limitation as set forth in the claim is found in a single prior art reference. MPEP § 2131.

Furthermore, there would be no teaching or suggestion to remove the topical particulates required in the Rabe et al. reference since doing so would eliminate the specific cosmetic or skincare purposes of Rabe et al. (See MPEP § 2143.01 reciting as a well-established principle of obviousness "the proposed modification cannot render the prior art unsatisfactory for its intended purpose"). Further, because the secondary references do not cure and cannot modify the Rabe et al. reference by eliminating the required topical particulates essential to the skincare and cosmetic purposes of Rabe et al., none of the obviousness rejections against any of the dependent claims of claims 1 and 22 can stand either. Doing so would be contrary to the well-established obviousness principles of MPEP § 2143.01.

Claim 9 has been similarly amended but with slightly different claim amendments to the other independent composition claims to instead recite "wherein the electrostatically dispensable disinfectant composition is free of immiscible and

insoluble topical composition particulates." This negative limitation is also inherent in the examples disclosed in Applicant's specification. Again, since Rabe et al. explicitly teaches such particulate topical composition particulates which are both immiscible and insoluble, the rejections upon claim 9 can no longer stand nor its dependents, and the obviousness rejections of claim 10 similarly fail for the reasons noted above.

Turning then to claim 13, it was also rejected as being anticipated by Rabe et al. Claim 13 is directed toward a system of electrostatic delivery of anti-microbial material including a disinfectant composition and an electrostatic dispensing apparatus. Again, Rabe et al. teaches an apparatus which includes a spray nozzle and creates electrically-charged droplets suitable for topical treatment as opposed to vapor and/or aerosol. In this regard, claim 13 has been amended to recite that the electrostatic dispensing apparatus is at least one of an electrostatic wick and a vaporizing emitter and further that it dispenses the disinfecting composition in a vapor and/or aerosol suspension form.² Considering that Rabe et al. teaches an electrostatic spraying device (which is neither a wick or vaporizing emitter) and teaches charged droplet topical form as opposed to vapor and aerosol suspension form, the rejections of claim 13 can no longer stand.

While obviousness rejections are raised over Rabe et al. in view of Schroeder et al. and/or Coffee against claims 14 and 16, these rejections cannot stand in view of the law of obviousness. Specifically, the asserted obviousness rejection contemplates changing the Rabe et al. reference to one which would result in a substantial reduction in the amount of airborne bacteria. However, that would be directly contrary to the teachings of the Rabe et al. reference in that it is directed towards a topical treatment in which electrostatically charged particles are applied to the skin. The explicit purpose of Rabe et al. is to have the composition applied to a surface, not vaporized into the surrounding environment. It is not seen how a topical treatment when applied on the skin can reduce airborne microbial materials. Again, Rabe et al. is very specific to a spraying technique³, and that the composition is applied to the skin. In short, neither Schroeder et al. nor Coffee can change the principal of operation of the

² It is noted that support for this amendment is found generally in Applicant's disclosure (see e.g. the paragraph bridging pages 7 and 8; and page 8, ¶ 2; and note the absence of any nozzles in the various vaporizing emitters and electrostatic wicks shown in the figures of Applicant's disclosure).

³ Specifically, Rabe et al. teaches a system whereby compositions are "directly applied to the skin by electrostatic spray techniques"; and that the "electrically-charged droplets seek the closest earthed object to discharge their electric charge, which can be arranged to be the desired spray target." Rabe et al., col. 12, lns. 8-15.

Rabe et al. reference since doing so would improperly "render the prior art unsatisfactory for its intended purpose" and "change the principle of operation of a reference" in violation of MPEP § 2143.01. Accordingly, the rejections of claims 13-17 should be withdrawn.

Finally, with respect to claim 18, this claim is directed toward a method of using glycol disinfecting compositions which reduce airborne microbial materials. This claim has been amended to incorporate the original limitations of claim 1, and therefore remains in the same form as Applicant's prior amendment. Like claim 16, this claim has been rejected as being obvious over Rabe et al. in further view of Schroeder et al. and Coffee. Again, the secondary references would run contrary to the teachings of Rabe et al. Specifically, there is no reason to change the Rabe et al. reference to one which would effect a 3-log reduction in airborne microbial levels as recited in claim 18. In order to do so, you would have to eliminate the charged spray droplets which "seek the closest earthed object" as set forth in Rabe et al. and instead make a vapor and aerosol suspension. Doing so would eliminate Rabe et al. as a topical treatment for cosmetic or skincare purposes which is the primary purpose and function taught by Rabe et al. Again, the proposed modification would render the prior art unsatisfactory for its intended purpose and would change the principle of operation of the Rabe et al. reference in violation of MPEP 2143. Since the proposed modifications with Schroeder et al. and Coffee run counter to the teachings of Rabe et al. and would change the principle of operation of Rabe et al., Applicant respectfully request that these obviousness rejections be withdrawn.

Finally, Applicant has added new method and system claims 25-27 as a means to further distinguish the references. For example, claims 25 and 26 relate to the electrostatic dispensing apparatus for the release of the composition into an air duct of a central air-handling system of a building. Support for this amendment is found at page 9, ¶ 2. Certainly, one could not propose spraying cosmetic solutions of Rabe et al. into an air duct, and it is not seen how or why one would achieve topical treatment of skin in an air duct of a central air handling system of a building. Accordingly, these claims are additionally patentable for that reason. Additionally, claim 27 has been added to recite that the electrostatic dispensing apparatus does not include a spray nozzle for dispensing the disinfecting composition. Support for this amendment is found generally within each of the figures showing exemplary devices, all of which do not include a spray nozzle. Again, the Rabe et al. reference specifically relies on nozzle so as to effect a topical treatment as opposed to general air release of vapor and

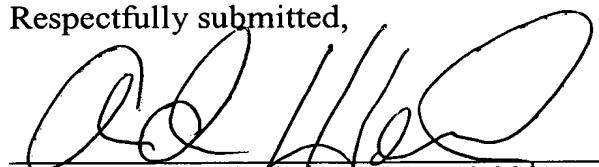
In re Apnl. Of: Claudio L.K. Lins
Application No.: 09/766,730

aerosol suspension for disinfecting purposes. Again, eliminating the nozzle structure would eliminate the spraying techniques used by Rabe et al. and would improperly change the entire purpose of Rabe et al. Accordingly, claim 27 is additionally patentable for this reason.

CONCLUSION

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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